# DEC SEQUENCE LISTING

(1) GENERAL THEORMATION:

- (i) APPLICANT: R. Bruce Wallace
- (ii) TITLE OF INVENTION: Ligation Amplification of Nucleic Acid Sequences
- (iii) NUMBER OF SEQUENCES: Fifteen
- (iv) CORRESPONDENCE ADDRESS:
  - (A) ADDRESSEE: City of Hope
  - (B) STREET: 1500 East Duarte Road
  - (C) CITY: Duarte
  - (D) STATE: California
  - (E) COUNTRY: United States of America
  - (F) ZIP: 91010-0269
  - (V) COMPUTER READABLE FORM:
    - (A) MEDIUM TYPE: 3M Double Density 5 1/4" diskette
    - (B) COMPUTER: Wang PC
    - (C) OPERATING SYSTEM: MS-DOS (R) Version 3.30
    - (D) SOFTWARE: Microsoft (R)
- (vi) CURRENT APPLICATION DATA:
  - (A) APPLICATION NUMBER:
  - (B) FILING DATE:
  - (C) CLASSIFICATION: Unknown
- (vii) PRIOR APPLICATION DATA: None
  - (A) APPLICATION NUMBER: 07/870,221
  - (B) FILING DATE: 20 April 1992
  - (C) CLASSIFICATION: Unknown
  - (D) APPLICATION NUMBER: 07/178,377
  - (B) FILING DATE: 06 April 1988
  - (C) CLASSIFICATION: Unknown

#### (viii) ATTORNEY/AGENT INFORMATION:

- (A) NAME: Irons, Edward S.
- (B) REGISTRATION NUMBER: 16,541
- (C) REFERENCE/DOCKET NUMBER: None
- (ix) TELECOMMUNICATION INFORMATION:
  - (A) TELEPHONE: (202) 785-6938
  - (B) TELEFAX: (202) 785-5351
  - (C) TELEX: 440087 LM WSH
- (2) INFORMATION FOR SEQ ID NO: 1:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 14
    - (B) TYPE: Oligonucleotide
    - (C) STRANDEDNESS: Single Stranded
    - (D) TOPOLOGY: Linear
  - (ii) MOLECULE TYPE: Not Applicable
  - (iii) HYPOTHETICAL: Not Applicable
  - (iv) ANTI-SENSE: Not Applicable
  - (v) FRAGMENT TYPE: Not Applicable
  - (vi) ORIGINAL SOURCE: Synthetically Prepared
  - (vii) IMMEDIATE SOURCE: Synthetically Prepared
  - (viii) POSITION IN GENOME: None
    - (ix) FEATURE: None
    - (x) PUBLICATION INFORMATION: None
    - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

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- (2) INFORMATION FOR SEQ ID NO: 2:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 8
    - (B) TYPE: Oligonucleotide

- (C) STRANDEDNESS: Single Stranded
- (D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE: Not Applicable
- (iii) HYPOTHETICAL: Not Applicable
- (iv) ANTI-SENSE: Not Applicable
- (v) FRAGMENT TYPE: Not Applicable
- (vi) ORIGINAL SOURCE: Synthetically Prepared
- (Vii) IMMEDIATE SOURCE: Synthetically Prepared
- (viii) POSITION IN GENOME: None
  - (ix) FEATURE: None
  - (x) PUBLICATION INFORMATION: None
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2: TCAGGAGT 8
- (2) INFORMATION FOR SEQ ID NO:3:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 6
    - (B) TYPE: Oligonucleotide
    - .(C) STRANDEDNESS: Single Stranded
    - (D) TOPOLOGY: Linear
  - (ii) MOLECULE TYPE: Not Applicable
  - (iii) HYPOTHETICAL: Not Applicable
  - (iv) ANTI-SENSE: Not Applicable
  - (V) FRAGMENT TYPE: Not Applicable
  - (vi) ORIGINAL SOURCE: Synthetically Prepared
  - (vii) IMMEDIATE SOURCE: Synthetically Prepared
  - (viii) POSITION IN GENOME: None
    - (ix) FEATURE: None

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- (x) PUBLICATION INFORMATION: None
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

- (2) INFORMATION FOR SEQ ID NO:4:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 8
    - (B) TYPE: Oligonucleotide
    - (C) STRANDEDNESS: Single Stranded
    - (D) TOPOLOGY: Linear
  - (ii) MOLECULE TYPE: Not Applicable
  - (iii) HYPOTHETICAL: Not Applicable
  - (iv) ANTI-SENSE: Not Applicable
  - (v) FRAGMENT TYPE: Not Applicable
  - (vi) ORIGINAL SOURCE: Synthetically Prepared
  - (vii) IMMEDIATE SOURCE: Synthetically Prepared
  - (viii) POSITION IN GENOME: None
    - (ix) FEATURE: None
    - (x) PUBLICATION INFORMATION: None
    - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
      ACAGGAGT 8
- (2) INFORMATION FOR SEQ ID NO:5:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 6
    - (B) TYPE: Oligonucleotide
    - (C) STRANDEDNESS: Single Stranded
    - (D) TOPOLOGY: Linear
  - (ii) MOLECULE TYPE: Not Applicable
  - (iii) HYPOTHETICAL: Not Applicable
  - (iv) ANTI-SENSE: Not Applicable
  - (v) FRAGMENT TYPE: Not Applicable
  - (vi) ORIGINAL SOURCE: Synthetically Prepared
  - (vii) IMMEDIATE SOURCE: Synthetically Prepared
  - (viii) POSITION IN GENOME: None

- (ix) FEATURE: None
- (x) PUBLICATION INFORMATION: None
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
  ACAGGA 6
- (2) INFORMATION FOR SEQ ID NO:6:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 14
    - (B) TYPE: Oligonucleotide
    - (C) STRANDEDNESS: Single Stranded
    - (D) TOPOLOGY: Linear
  - (ii) MOLECULE TYPE: Not Applicable
  - (iii) HYPOTHETICAL: Not Applicable
  - (iv) ANTI-SENSE: Not Applicable
  - (v) FRAGMENT TYPE: Not Applicable
  - (vi) ORIGINAL SOURCE: Synthetically Prepared
  - (vii) IMMEDIATE SOURCE: Synthetically Prepared
  - (viii) POSITION IN GENOME: None
    - (ix) FEATURE: None
    - (x) PUBLICATION INFORMATION: None
    - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6: CACCTGACTC CTGA 14
- (2) INFORMATION FOR SEQ ID NO:7:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 14
    - (B) TYPE: Oligonucleotide
    - (C) STRANDEDNESS: Single Stranded
    - (D) TOPOLOGY: Linear
  - (ii) MOLECULE TYPE: Not Applicable
  - (iii) HYPOTHETICAL: Not Applicable

- (iv) ANTI-SENSE: Not Applicable
- (v) FRAGMENT TYPE: Not Applicable
- (vi) ORIGINAL SOURCE: Synthetically Prepared
- (vii) IMMEDIATE SOURCE: Synthetically Prepared
- (viii) POSITION IN GENOME: None
  - (ix) FEATURE: None
  - (x) PUBLICATION INFORMATION: None
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
    CACCTGACTC CTGT 14
- (2) INFORMATION FOR SEQ ID NO:8:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 8
    - (B) TYPE: Oligonucleotide
    - (C) STRANDEDNESS: Single Stranded
    - (D) TOPOLOGY: Linear
  - (ii) MOLECULE TYPE: Not Applicable
  - (iii) HYPOTHETICAL: Not Applicable
  - (iv) ANTI-SENSE: Not Applicable
  - (v) FRAGMENT TYPE: Not Applicable
  - (vi) ORIGINAL SOURCE: Synthetically Prepared
  - (vii) IMMEDIATE SOURCE: Synthetically Prepared
  - (viii) POSITION IN GENOME: None
    - (ix) FEATURE: None
    - (x) PUBLICATION INFORMATION: None
    - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
      GGAGAAGT 8
- (2) INFORMATION FOR SEQ ID NO:9:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 6

- (B) TYPE: Oligonucleotide
- (C) STRANDEDNESS: Singl Stranded
- (D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE: Not Applicable
- (iii) HYPOTHETICAL: Not Applicable
- (iv) ANTI-SENSE: Not Applicable
- (v) FRAGMENT TYPE: Not Applicable
- (vi) ORIGINAL SOURCE: Synthetically Prepared
- (vii) IMMEDIATE SOURCE: Synthetically Prepared
- (viii) POSITION IN GENOME: None
  - (ix) FEATURE: None
  - (x) PUBLICATION INFORMATION: None
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
    GGAGAA 6
- (2) INFORMATION FOR SEQ ID NO:10:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 19
    - (B) TYPE: Oligonucleotide
    - (C) STRANDEDNESS: Single Stranded
    - (D) TOPOLOGY: Linear
  - (ii) MOLECULE TYPE: Not Applicable
  - (iii) HYPOTHETICAL: Not Applicable
  - (iv) ANTI-SENSE: Not Applicable
  - (v) FRAGMENT TYPE: Not Applicable
  - (vi) ORIGINAL SOURCE: Synthetically Prepared
  - (vii) IMMEDIATE SOURCE: Synthetically Prepared
  - (viii) POSITION IN GENOME: None
    - (ix) FEATURE: None
    - (x) PUBLICATION INFORMATION: None

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10: CTCCTGAGGA GAAGTCTGC 19

### (2) INFORMATION FOR SEQ ID NO:11:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 19
  - (B) TYPE: Oligonucleotide
  - (C) STRANDEDNESS: Single Stranded
  - (D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE: Not Applicable
- (iii) HYPOTHETICAL: Not Applicable
- (iv) ANTI-SENSE: Not Applicable
- (v) FRAGMENT TYPE: Not Applicable
- (vi) ORIGINAL SOURCE: Synthetically Prepared
- (vii) IMMEDIATE SOURCE: Synthetically Prepared
- (viii) POSITION IN GENOME: None
  - (ix) FEATURE: None
  - (x) PUBLICATION INFORMATION: None
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11: CTCCTGTGGA GAAGTCTGC 19

## (2) INFORMATION FOR SEQ ID NO:12:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 23
  - (B) TYPE: Oligonucleotide
  - (C) STRANDEDNESS: Single Stranded
  - (D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE: Not Applicable
- (iii) HYPOTHETICAL: Not Applicable
- (iv) ANTI-SENSE: Not Applicable
- (v) FRAGMENT TYPE: Not Applicable

- (vi) ORIGINAL SOURCE: Synthetically Prepared
- (vii) IMMEDIATE SOURCE: Synthetically Prepared
- (viii) POSITION IN GENOME: None
  - (ix) FEATURE: None
  - (x) PUBLICATION INFORMATION: None
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
    CGGCAGACTT CTCCTCAGGA GTC 23

## (2) INFORMATION FOR SEQ ID NO:13:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 23
  - (B) TYPE: Oligonucleotide
  - (C) STRANDEDNESS: Single Stranded
  - (D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE: Not Applicable
- (iii) HYPOTHETICAL: Not Applicable
- (iv) ANTI-SENSE: Not Applicable
- (v) FRAGMENT TYPE: Not Applicable
- (vi) ORIGINAL SOURCE: Synthetically Prepared
- (vii) IMMEDIATE SOURCE: Synthetically Prepared
- (viii) POSITION IN GENOME: None
  - (ix) FEATURE: None
  - (x) PUBLICATION INFORMATION: None
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
    CGGCAGACTT CTCCACAGGA GTC 23

#### (2) INFORMATION FOR SEQ ID NO:14:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 14
  - (B) TYPE: Oligonucleotide
  - (C) STRANDEDNESS: Single Stranded

- (D) TOPOLOGY: Linear
- (ii) MOLECULE TYPE: Not Applicable
- (iii) HYPOTHETICAL: Not Applicable
- (iv) ANTI-SENSE: Not Applicable
- (v) FRAGMENT TYPE: Not Applicable
- (vi) ORIGINAL SOURCE: Synthetically Prepared
- (vii) IMMEDIATE SOURCE: Synthetically Prepared
- (viii) POSITION IN GENOME: None
  - (ix) FEATURE: None
  - (x) PUBLICATION INFORMATION: None
  - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14: CCTCTTCAGA CGGC 14
- (2) INFORMATION FOR SEQ ID NO:15:
  - (i) SEQUENCE CHARACTERISTICS:
    - (A) LENGTH: 8
    - (B) TYPE: Oligonucleotide
    - (C) STRANDEDNESS: Single Stranded
    - (D) TOPOLOGY: Linear
  - (ii) MOLECULE TYPE: Not Applicable
  - (iii) HYPOTHETICAL: Not Applicable
  - (iv) ANTI-SENSE: Not Applicable
  - (v) FRAGMENT TYPE: Not Applicable
  - (vi) ORIGINAL SOURCE: Synthetically Prepared
  - (vii) IMMEDIATE SOURCE: Synthetically Prepared
  - (viii) POSITION IN GENOME: None
    - (ix) FEATURE: None
    - (x) PUBLICATION INFORMATION: None
    - (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15: TGAGGACT 8